## **Recovery Plan Action Status**

Plan Name: Recovery Plan for the Guajon or Puerto Rican Demon

Plan Status: Final Plan Date: 24-Sep-04

Lead Agency: USFWS
Lead Office: Caribbean Ecological Services Field Office 851-7297)

| Species                                | Action Priority # | Action # | Action<br>Description  | Action Status | Est. Initiation Date | Est. Completion<br>Date | Responsible<br>Parties  | Work Type  | Labor Type  | Action Comments  |
|--|-------------------|----------|--|---------------|----------------------|-------------------------|---|--|---|--|
| Guajon<br>(Eleutherodactylus<br>cooki) | 1                 | 1        | Conduct surveys<br>within the known<br>range of the<br>species | Not Started   |                      |                         | Puerto Rico Department of Natural and Environmental Resources, USFWS Regional Office 4, FWS, Caribbean Field Office, University Researchers   | Research:<br>Population Surveys  | Contract, Internal<br>Field Assistance  | In coordination with DNER and universities   |
| Guajon<br>(Eleutherodactylus<br>cooki) | 1                 | 10       | Restore degraded habitats                                      | Not Started   |                      |                         | Private landowners,<br>Puerto Rico<br>Department of<br>Natural and<br>Environmental<br>Resources,<br>USFWS Regional<br>Office 4, FWS,<br>Caribbean Field<br>Office, University<br>Researchers, Other<br>Local,<br>Commonwealth<br>and Federal<br>agencies | Habitat Maintenance and Manipulation, Management: Land Use, Other: Information and Education | Internal Field<br>Assistance, Internal<br>Technical<br>Assistance,<br>Volunteer   | jointly with<br>Commonwealth<br>agencies and non-<br>governmental<br>organizations |
| Guajon<br>(Eleutherodactylus<br>cooki) | 2                 | 11       | Assess feeding ecology   | Not Started   |                      |                         | Puerto Rico Department of Natural and Environmental Resources, USFWS Regional Office 4, FWS, Caribbean Field Office, University Researchers   | Research: Other Information  | Contract, Graduate<br>Student, Internal<br>Field Assistance,<br>Internal Technical<br>Assistance,<br>Species Expert,<br>Volunteer | Jointly with government organizations and universities                             |
| Guajon<br>(Eleutherodactylus<br>cooki) | 2                 | 12       | Assess movement patterns                                       | Not Started   |                      |                         | Puerto Rico Department of Natural and Environmental Resources, USFWS Regional Office 4, FWS, Caribbean Field Office, University Researchers   | Research:<br>Competition,<br>Research:<br>Migration,<br>Research: Other<br>Information       | Contract, Graduate<br>Student, Internal<br>Field Assistance,<br>Internal Technical<br>Assistance,<br>Species Expert,<br>Volunteer | Jointly with government organizations and universities                             |

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|--|-------------------|----------|---|---------------|----------------------|-------------------------|---|---|---|---|
| Guajon<br>(Eleutherodactylus<br>cooki) | 2                 | 13       | Evaluate the effects of introduced potential predators                                      | Not Started   |                      |                         | Puerto Rico Department of Natural and Environmental Resources, USFWS Regional Office 4, FWS, Caribbean Field Office, University Researchers   | Management:<br>Predator and<br>Competitor Control,<br>Research:<br>Predation  | Contract, Internal<br>Field Assistance,<br>Internal Technical<br>Assistance,<br>Species Expert                                    | Jointly with<br>government<br>organizations and<br>universities |
| Guajon<br>(Eleutherodactylus<br>cooki) | 2                 | 14       | Evaluate the effects<br>of native predators,<br>competitors,<br>parasites, and<br>pathogens | Not Started   |                      |                         | Puerto Rico Department of Natural and Environmental Resources, USFWS Regional Office 4, FWS, Caribbean Field Office, University Researchers   | Management: Disease Control, Management: Predator and Competitor Control, Research: Competition, Research: Disease, Research: Population Surveys, Research: Predation | Contract, Graduate<br>Student, Internal<br>Field Assistance,<br>Internal Technical<br>Assistance,<br>Species Expert,<br>Volunteer | In coordination with DNER                                       |
| Guajon<br>(Eleutherodactylus<br>cooki) | 2                 | 15       | Determine genetic<br>variability and<br>genetic flow among<br>population                    | Not Started   |                      |                         | Puerto Rico Department of Natural and Environmental Resources, USFWS Regional Office 4, FWS, Caribbean Field Office, University Researchers   | Research: Genetics  | Contract, Graduate<br>Student, Internal<br>Field Assistance,<br>Internal Technical<br>Assistance,<br>Species Expert               | In coordination with DNER                                       |
| Guajon<br>(Eleutherodactylus<br>cooki) | 3                 | 16       | Monitor effects of<br>atmosphere<br>phenomena on<br>guajon populations                      | Not Started   |                      |                         | Puerto Rico Department of Natural and Environmental Resources, USFWS Regional Office 4, FWS, Caribbean Field Office, University Researchers   | Research: Habitat<br>Status, Research:<br>Other Information,<br>Research:<br>Population Surveys   | Contract, Internal<br>Field Assistance,<br>Species Expert,<br>Volunteer   | In coordination with other government agencies                  |
| Guajon<br>(Eleutherodactylus<br>cooki) | 3                 | 17       | Monitor the use<br>and effect of<br>agrochemicals   | Not Started   |                      |                         | Private landowners, Puerto Rico Department of Natural and Environmental Resources, USFWS Regional Office 4, FWS, Caribbean Field Office, University Researchers, Other Local, Commonwealth and Federal agencies | Management: Habitat Maintenance and Manipulation, Management: Land Use, Other: Information and Education, Other: Regulations, Research: Environmental Contaminants    | Internal Field<br>Assistance,<br>Species Expert   | In coordination with other government agencies                  |

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|--|-------------------|----------|--|-----------------|----------------------|-------------------------|---|---|---|---------------------------|
| Guajon<br>(Eleutherodactylus<br>cooki) | 3                 | 18       | Assess target audiences  | Ongoing Current | FY 2006              | FY 2011                 | Private landowners,<br>Puerto Rico<br>Department of<br>Natural and<br>Environmental<br>Resources,<br>USFWS Regional<br>Office 4, FWS,<br>Caribbean Field<br>Office, University<br>Researchers, Other<br>Local,<br>Commonwealth<br>and Federal<br>agencies                                       | Other: Information and Education  | Internal<br>Administrative,<br>Internal Technical<br>Assistance   |                           |
| Guajon<br>(Eleutherodactylus<br>cooki) | 3                 | 19       | Develop an outreach campaign   | Ongoing Current | FY 2000 - FY 2004    | FY 2011                 | Private landowners,<br>Non-governmental<br>organizations,<br>Puerto Rico<br>Department of<br>Natural and<br>Environmental<br>Resources,<br>USFWS Regional<br>Office 4, FWS,<br>Caribbean Field<br>Office, University<br>Researchers, Other<br>Local,<br>Commonwealth<br>and Federal<br>agencies | Other: Information and Education  | Internal<br>Administrative,<br>Internal Technical<br>Assistance   |                           |
| Guajon<br>(Eleutherodactylus<br>cooki) | 1                 | 2        | Identify potential<br>habitat for the<br>species and search<br>for new populations | Not Started     |                      |                         | Puerto Rico Department of Natural and Environmental Resources, USFWS Regional Office 4, FWS, Caribbean Field Office, University Researchers   | Research: Demographic Studies, Research: Habitat Requirements, Research: Habitat Status, Research: Population Surveys | Contract, Graduate<br>Student, Internal<br>Field Assistance,<br>Internal Technical<br>Assistance,<br>Species Expert,<br>Volunteer | In coordination with DNER |
| Guajon<br>(Eleutherodactylus<br>cooki) | 3                 | 20       | Execute the<br>Outreach Plan   | Ongoing Current | FY 2000 - FY 2004    | FY 2011                 | Private landowners,<br>Non-governmental<br>organizations,<br>Puerto Rico<br>Department of<br>Natural and<br>Environmental<br>Resources,<br>USFWS Regional<br>Office 4, FWS,<br>Caribbean Field<br>Office, University<br>Researchers   | Other: Information and Education  | Internal<br>Administrative,<br>Internal Technical<br>Assistance   |                           |

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| Guajon<br>(Eleutherodactylus<br>cooki) | 3                 | 21       | Evaluate the effectiveness of the Outreach plan   | Ongoing Current | FY 2000 - FY 2004    | FY 2011                 | Non-governmental organizations, Puerto Rico Department of Natural and Environmental Resources, USFWS Regional Office 4, FWS, Caribbean Field Office, Other Local, Commonwealth and Federal agencies   | Other: Information and Education                    | Internal<br>Administrative,<br>Internal Technical<br>Assistance |  |
| Guajon<br>(Eleutherodactylus<br>cooki) | 3                 | 22       | Refine recovery<br>criteria and<br>determine what<br>additional actions<br>are necessary to<br>achieve recovery<br>criteria | Not Started     |                      |                         | Private landowners,<br>Non-governmental<br>organizations,<br>Puerto Rico<br>Department of<br>Natural and<br>Environmental<br>Resources,<br>USFWS Regional<br>Office 4, FWS,<br>Caribbean Field<br>Office, University<br>Researchers, Other<br>Local,<br>Commonwealth<br>and Federal<br>agencies | Acquisition:<br>General                             | Internal<br>Administrative                                      |  |
| Guajon<br>(Eleutherodactylus<br>cooki) | 1                 | 3        | Evaluate public lands that contain suitable habitat for the guajon  | Complete        | FY 2007              | FY 2009                 | Puerto Rico Department of Natural and Environmental Resources, USFWS Regional Office 4, FWS, Caribbean Field Office, University Researchers   | Management:<br>General                              | Graduate Student  | In coordination with<br>other government<br>agencies and<br>private landowners |
| Guajon<br>(Eleutherodactylus<br>cooki) | 1                 | 4        | Protect and manage public lands   | Not Started     |                      |                         | Non-governmental organizations, Puerto Rico Department of Natural and Environmental Resources, USFWS Regional Office 4, FWS, Caribbean Field Office, Other Local, Commonwealth and Federal agencies   | Acquisition:<br>General,<br>Management: Land<br>Use | Internal<br>Administrative,<br>Internal Technical<br>Assistance | In coordination with<br>other government<br>agencies and<br>private landowners |

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| Guajon<br>(Eleutherodactylus<br>cooki) | 1                 | 5        | Prevent reduction<br>of habitat by<br>developing and<br>implementing<br>zoning regulations,<br>and carefully<br>evaluating<br>development<br>projects | Ongoing Current | FY 2000 - FY 2004    | FY 2011                 | Puerto Rico Department of Natural and Environmental Resources, USFWS Regional Office 4, FWS, Caribbean Field Office, Other Local, Commonwealth and Federal agencies   | Management: Habitat Maintenance and Manipulation, Management: Land Use, Management: Planning, Other: Administration, Other: Law Enforcement, Other: Regulations | Internal Field<br>Assistance                                    | Jointly with<br>Commonwealth<br>governement<br>agencies  |
| Guajon<br>(Eleutherodactylus<br>cooki) | 1                 | 6        | Establish and implement management plans that address concerns for the guajon and its habitat   | Complete        | FY 2000 - FY 2004    | FY 2006                 | Non-governmental organizations, USFWS Regional Office 4, FWS, Caribbean Field Office, University Researchers, Other Local, Commonwealth and Federal agencies  | Acquisition:<br>General   | Internal<br>Administrative,<br>Internal Technical<br>Assistance | In coordination with other government agencies, non-governmental organizations, and private landowners. PR Conservation Trust manages critical habitat unit within the Panduras region, Yabucoa. |
| Guajon<br>(Eleutherodactylus<br>cooki) | 1                 | 7        | Work with private<br>landowners to<br>protect and<br>manage private<br>lands  | Not Started     |                      |                         | Private landowners,<br>Non-governmental<br>organizations,<br>Puerto Rico<br>Department of<br>Natural and<br>Environmental<br>Resources,<br>USFWS Regional<br>Office 4, FWS,<br>Caribbean Field<br>Office, Other Local,<br>Commonwealth<br>and Federal<br>agencies | Acquisition:<br>General,<br>Management: Land<br>Use, Management:<br>Planning  | Internal<br>Administrative,<br>Internal Technical<br>Assistance | In coordination with<br>private landowners<br>and other<br>government<br>agencies  |
| Guajon<br>(Eleutherodactylus<br>cooki) | 1                 | 8        | Establish corridors<br>and buffer zones of<br>low human use,<br>surrounding known<br>and potential<br>guajon habitat                                  | Not Started     |                      |                         | Private landowners, Puerto Rico Department of Natural and Environmental Resources, USFWS Regional Office 4, FWS, Caribbean Field Office, University Researchers, Other Local, Commonwealth and Federal agencies   | Acquisition,<br>Management: Land<br>Use, Management:<br>Planning  | Internal<br>Administrative,<br>Internal Technical<br>Assistance | In coordination qith<br>private landowners<br>and other<br>government<br>agencies  |

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| Guajon<br>(Eleutherodactylus<br>cooki) | 1                 |          | Monitor and reduce human disturbance | Not Started   |                      |                         | Puerto Rico Department of Natural and Environmental Resources, USFWS Regional Office 4, FWS, Caribbean Field Office, Other Local, Commonwealth and Federal agencies |           | Contract, Internal<br>Technical<br>Assistance |                 |